



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

①

D206-667-247TRN
Job Sheet 202722



Part No: D206-667-247TRN

Job Qty: 1 pcs

Part Name: Crosstube Assembly, Mid Aft



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/1/19

Job Tracking No:

Due Date: 11/22/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D206-667-247 REV.B IPP rev:A 11.01.06 new issue DD ver:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	DAS	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier				
100	Mori Seiki TL-40 - 1	1 pcs	11/22/19	11/22/19	1.00	1.33	Mori Seiki TL-40 - 1			66	2019/11/15
110	QC 2	1 pcs	11/22/19	11/22/19	0.00	0.00	QC 2 - 1			9-89	
							QC 2 - 12				
							QC 2 - 14				
							QC 2 - 17				
							QC 2 - 19				
							QC 2 - 2				
							QC 2 - 20				
							QC 2 - 22				
							QC 2 - 23				
							QC 2 - 25				
							QC 2 - 32				
							QC 2 - 33				
							QC 2 - 35				
							QC 2 - 39				
							QC 2 - 4				
							QC 2 - 40				
							QC 2 - 44				
							QC 2 - 45				
							QC 2 - 48				
							QC 2 - 49				
							QC 2 - 50				
							QC 2 - 51				
							QC 2 - 52				
							QC 2 - 57				
							QC 2 - 62				
							QC 2 - 63				
							QC 2 - 8				
							QC 2 - 66				
							QC 2 - 64				
							QC 2 - 65				

Plex 11/1/19 10:10 AM Dart.lajeunesse.marie

				QC 2 - 5		
				QC 2 - 71		
				QC 2 - 73		
				QC 2 - 69	DAS	
120	Mori Seiki TL-40 - 1 - B4B	1 pcs	11/22/19	1.00 1.33	Mori Seiki TL-40 - 1 - B4B	66 2019/11/18
130	QC 2	1 pcs	11/22/19	0.00 0.00	QC 2 - 1	9-89
				QC 2 - 12		
				QC 2 - 14		
				QC 2 - 17		
				QC 2 - 19		
				QC 2 - 2		
				QC 2 - 20		
				QC 2 - 22		
				QC 2 - 23		
				QC 2 - 25		
				QC 2 - 32		
				QC 2 - 33		
				QC 2 - 35		
				QC 2 - 39		
				QC 2 - 4		
				QC 2 - 40		
				QC 2 - 44		
				QC 2 - 45		
				QC 2 - 48		
				QC 2 - 49		
				QC 2 - 50		
				QC 2 - 51		
				QC 2 - 52		
				QC 2 - 57		
				QC 2 - 62		
				QC 2 - 63		
				QC 2 - 8	DAS	
				QC 2 - 66	66 2019/11/18	
				QC 2 - 64	9-89	
				QC 2 - 65		
				QC 2 - 5		
				QC 2 - 71		
				QC 2 - 73		
				QC 2 - 69		
140	QC 8	1 pcs	11/22/19	0.00 0.00	QC 8 - 12	
				QC 8 - 14		
				QC 8 - 17		
				QC 8 - 20		
				QC 8 - 25		
				QC 8 - 3		
				QC 8 - 32		
				QC 8 - 33		
				QC 8 - 35		
				QC 8 - 39		
				QC 8 - 4		
				QC 8 - 44		
				QC 8 - 45		
				QC 8 - 49		
				QC 8 - 58		
				QC 8 - 8		
				QC 8 - 9		
				QC 8 - 68	DAS	
				QC 8 - 67	76	
				QC 8 - 1 (A)	9-89	

Plex 11/1/19 10:10 AM Dart.lajeunesse.marie

				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
145 Crosstubes - 2 - B4B	1 pcs	11/22/19	0.00 0.50	Crosstubes - 1 - B4B	
				Crosstubes - 2 - B4B	BB 11/22/2019
				Crosstubes - 3 - B4B	
				Crosstubes - 4 - B4B	
150 Crosstubes - 3 - B4B	1 pcs	11/22/19	0.00 0.32	Crosstubes - 1 - B4B	
				Crosstubes - 2 - B4B	
				Crosstubes - 3 - B4B	NOV 26 2019
				Crosstubes - 4 - B4B	
160 QC 7	1 pcs	11/22/19	0.00 0.00	QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	
				QC 7 - 24	
				QC 7 - 43	
				QC 7 - 61	
				QC 7 - 81	DAS
				QC 7 - 76	76
				QC 7 - 79	9-89
170 Packaging 3-1 - Stock - B4B	1 pcs	11/22/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	

				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	33 11/26/2019
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				180 QC 21 - SA	1 pcs
				11/22/19	0.00 0.00
				QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 53	

Part Op 100 - Mori Seiki CNC Lathe Large - 1-Fill tube with sand & install plugs 206-207 on both ends as per Folio FB030 2-Turn Descriptions: first side as per Folio FB030 3-Blend transition line with belt sander 60 grit.
110 - QC2- Inspect parts off machine FAI/FAIB
120 - Mori Seiki CNC Lathe Large - 1-Turn second side as per Folio FB030 2-File down transition lines smooth.
130 - QC2- Inspect parts off machine FAI/FAIB
140 - QC8- Inspect parts - second check
145 - Crosstubes - GRIND ONLY TRANSITION LINES SMOOTH LONGITUDE WAY.
150 - Crosstubes - 1- handfinish X-TUBE INSIDE AND OUT
160 - QC7-Inspect Chemical Conversion Coat
170 - Identify as per dwg & Stock Location: _____ - LOCATION : LG014
180 - QC21- Final Inspection - Work Order Release

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D6004-115	Crosstube Material	1 pcs (1 ea)	100-Mori Seiki TL-40 - 1	F107869

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Mori Seiki TL-40 - 1	D6004-115	1	31	0

Part Specifications				
Specifications could not be found.				



Container No: S232296



Part: D206-667-247TRN

Job No: 202722

Serial No/Batch: S232296

Revision: B

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-6200
Email: sales@dartaero.com
www.dartaerospace.com

Plex 11/1/19 10:10 AM Dart.lajeunesse.marie

①

DART AEROSPACE LTD	Work Order:	702722
Description: Crosstube Assembly, Mid Aft	Part Number:	D206-667-247
Inspection Dwg: D206-667-247 Rev: A		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.490	+0.005/-0.000	2.490	✓		CNC-04	
	2.025	+0.005/-0.000	2.030	✓			
	2.079	+0.005/-0.000	2.084	✓			
	2.145	+0.005/-0.000	2.150	✓			
	2.209	+0.005/-0.000	2.214	✓			
	2.287	+0.005/-0.000	2.292	✓			
	2.363	+0.005/-0.000	2.368	✓			
	0.200	+/-0.010	.202	✓		CNC-08	
	R0.063	+/-0.010	.063	✓		RG	
	R2.00	+/-0.010	2.000	✓			
	R0.063	+/-0.010	.063	✓			
	4.438	+/-0.010	4.439	✓		CNC-08	
SIDE B	2.490	+0.005/-0.000	2.487		✓	CNC-04	
	2.025	+0.005/-0.000	2.030	✓			
	2.079	+0.005/-0.000	2.084	✓			
	2.145	+0.005/-0.000	2.150	✓			
	2.209	+0.005/-0.000	2.214	✓			
	2.287	+0.005/-0.000	2.292	✓			
	2.363	+0.005/-0.000	2.368	✓			
	0.200	+/-0.010	.207	✓		CNC-08	
	R0.063	+/-0.010	.063	✓		RG	
	R2.00	+/-0.010	2.000	✓			
	R0.063	+/-0.010	.063	✓			
	4.438	+/-0.010	4.438	✓		CNC-08	
	99.76	+/-0.020	99.75	✓		Tape	

Item	Qty	Part Number	Description
	-247		
1	X	D206-587-247	CROSSTUBE ASSEMBLY (206L MID AFT)
2	1	D6004-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2882-1	SUPPORT
6	4	D3595-063-460	RUBBER CUSHION
7	4	MS21920-22	CLAMP
8	14	MS20601AD4W10	RVET (OR NAS8302B-4-10)
9	A/R	PROSEAL 890 B-2	SEALANT, AMS-S-8802 CLASS B-2

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6004-115
FINISHED LENGTH = 93.7650.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-587-247" AND BATCH NUMBER ON INSIDE OF CLIFF PER DART QSI 044 6.4 (VIBRATING STYLUS).
- 7) WEIGHT: 21.1 lbs (407 = 17.7 lbs)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY.
TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 028.
- 12) TO INSTALL D2892-1 SUPPORT, ABRASE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180 GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 13) INSTALL MS21920-22 CLAMPS WITH D3595-063-460 RUBBER CUSHIONS TO SECURE THE D2892-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

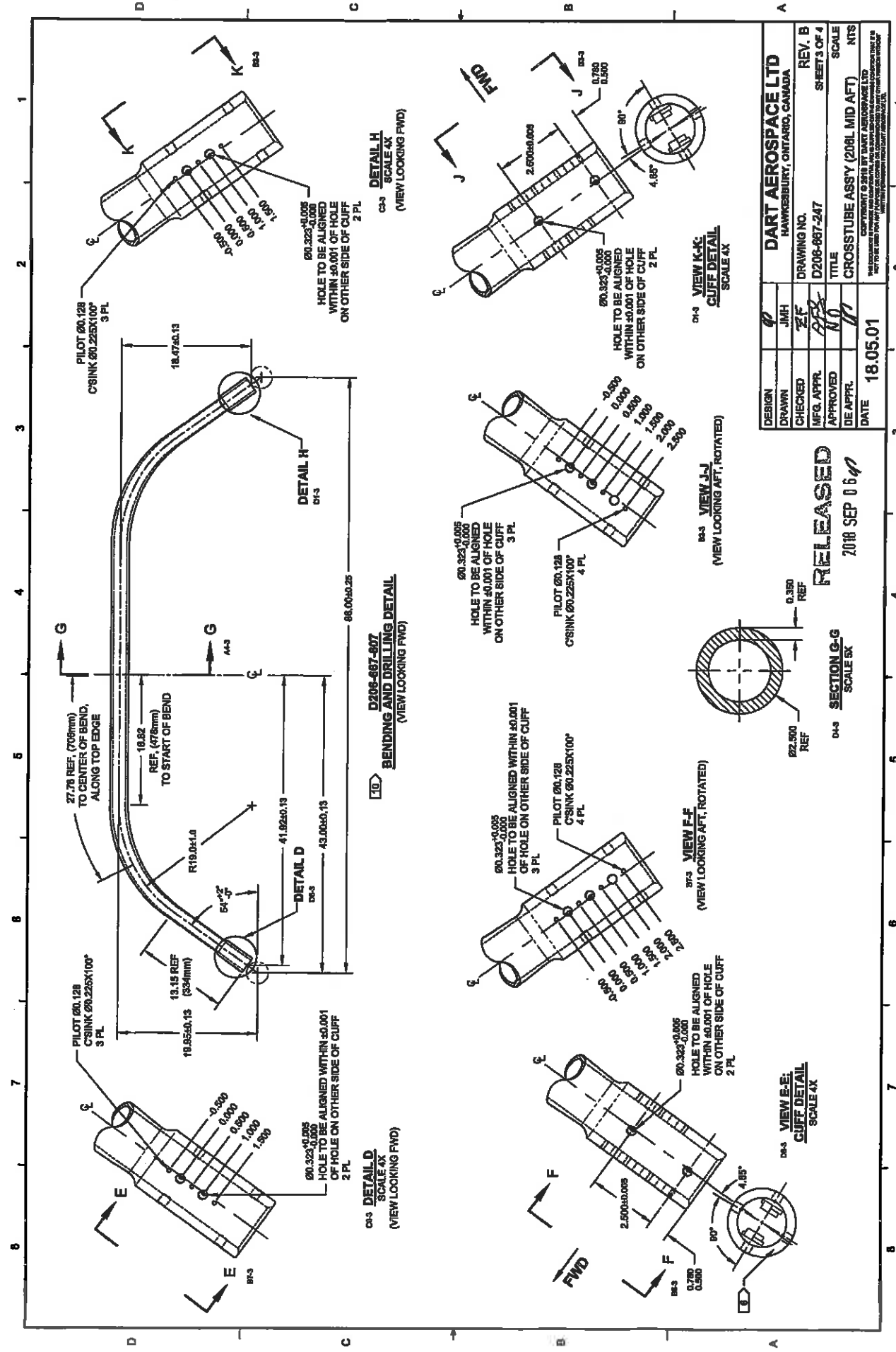
WORK ORDER
NO. 707722

MUS
1971-01

B	REVISE SHEET 2 ASSEMBLY DETAIL HOLE PATTERN PER DART 12-21. UPDATE PARTS LIST AND GENERAL NOTES 12 & 15 TO INCORPORATE DED A-1.	JMH	18.05.01
A	NEW ISSUE	CP	10.12.23
REV.	DESCRIPTION	BY	DATE
DESIGN	JMH		
CHECKED	ZF		
MFG. APPR	DF		
DE APPR	NO		
DATE	18.05.01		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. D206-587-247			
TITLE CROSSTUBE ASSY (206L MID AFT)			
REV. B SHEET 1 OF 4			
SCALE NTS			
CONTRACT NO. 1971-01 DART AEROSPACE LTD			
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED IN THE ORDER. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			

RELEASED

2018 SEP 05
2018-777





NCR No. _____		Job: _____		Part No. _____					
Date :		Sequence #:		QTY Affected :					
Description Work Order Deviation		Disposition		MRB (QS042)					
				Completed By					
				Lead hand / Supervisor					
				QC / QA Coordinator					
Root Cause		FAULT CATEGORY							
Operator		Pressure/Forced		Contamination		Power Loss/Surge		Positioned Wrong	
Manufacturing Process		Bending		Misaligned/off center		Folio/Program		Outside Tolerance	
Equip/Tooling		Crushing		BOM/Route		Grain Direction		Drawing	
Handling/Preservation		Cracks		Broken/Damage/Defect		Weld		Finish	
Material		Crimp/kink/Ripple/Wave/Twist		Incomplete/Unclear Instructions		Wrong Stock Pulled		Part Lost/Missing	
Product Improvement		Marks/Chatter		Drill Holes		Out of Sequence		Misread	
Process Improvement		Mislabeled		Fit/Function		Off-set/Set-up			
Human Factors		Other/Details:							